

MANUFACTURING METHOD FOR HETEROJUNCTION THIN FILM SOLAR BATTERY

Patent number: JP2002343987
Publication date: 2002-11-29
Inventor: KUSHIYA KATSUMI; NAGOYA YOSHINORI; TACHIYUKI MUNEYORI
Applicant: SHOWA SHELL SEKIYU
Classification:
- **International:** H01L31/04
- **europaen:**
Application number: JP20010144523 20010515
Priority number(s): JP20010144523 20010515

[Report a data error here](#)

Abstract of JP2002343987

PROBLEM TO BE SOLVED: To suppress the generation of colloidal matters in a solution mixture, to prevent the degradation of the film quality of a boundary layer and the decline of joining characteristics with a light absorption layer, to reduce a manufacturing cost and to improve the yield of a product. **SOLUTION:** In a solution growth tank 2 storing a strong alkaline solution mixture for which a solution (1) for which aqueous ammonia or aqueous ammonium hydroxide is a pH regulator and ammonium zinc complex salt is formed and an aqueous solution (2) for which sulfur containing salt is dissolved in pure water are mixed, a work piece H for which a metal back surface electrode C and the light absorption layer D are successively laminated on a substrate B is immersed, and a film is formed with the transparency of the solution mixture in the range of about 100% to 60%. Thus, with less colloid generation, a zinc mixed crystal compound semiconductor thin film is chemically grown. The film can be used for a sputter window layer and for an MOCVD window layer.

